

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of manufacturing a tire, ~~in which a green tire is formed by providing a tire structural member, including bead cores, around a toroidal hard core, loaded in a mold, and vulcanized to obtain a pneumatic tire, the method comprising the steps of:~~

forming a carcass along an outer circumference of ~~the~~ a toroidal hard core; ~~and~~
providing a sheet member inside the carcass in a radial direction at both edges of the carcass;

turning up, around ~~the~~ bead cores, inner edge portions in a radial direction of the carcass formed on an outer surface of the hard core, by expanding outwardly in a radial direction expanding/contracting means inserted at an inner side in a radial direction of the bead cores and/or the hard core, to form a green tire; and

loading the green tire into a mold and vulcanizing the green tire to obtain a pneumatic tire.

2. (original): The method of manufacturing a tire according to claim 1, wherein the step of forming the carcass comprises:

setting an unvulcanized rubber-coated cord on the hard core from one side surface portion to the other side surface portion of the hard core,

turning the cord back at the other side surface,
setting the cord on the hard core from the other side surface portion toward the one side surface portion and turning the cord back again, and
setting the cord sequentially along a core circumferential direction.

3. (currently amended): An apparatus for manufacturing a green tire, ~~applicable to a method of manufacturing a tire in which a green tire formed by providing a tire structural member, including bead cores, around a toroidal hard core, is loaded in a mold and vulcanized to obtain a pneumatic tire, the apparatus~~ comprising:

a toroidal hard core;

a tire structural member including bead cores;

expanding/contracting means which can be inserted at an inner side in a radial direction of the bead cores and/or the hard core, ~~and~~ which expand and/or contract in a radial direction, and which is provided with a sheet member; and

moving means for moving the expanding/contracting means in an internal direction or an external direction with respect to the hard core.

4. (original): The apparatus for manufacturing a green tire according to claim 3, wherein the expanding/contracting means are toroidal bladders.

5. (original): The apparatus for manufacturing a green tire according to claim 4, wherein engaging members, which are engageable with inner edge portions in a radial direction of the carcass, are provided at outer sides in an axial direction of the bladders.

6. (original): The apparatus for manufacturing a green tire according to claim 4, wherein carcass-engaging portions, which, in a contracted state of the bladders, are engageable with inner edge portions in a radial direction of the carcass, are formed integrally with outer surfaces in an axial direction of the bladders.

7. (previously presented): The apparatus for manufacturing a green tire according to claim 4, further comprising pressing means for pressing the bladders, when they are inflated, toward the hard core, and press-contacting turn-up portion of the carcass with a main body.

8. (currently amended): The apparatus for manufacturing a green tire according to claim 3, wherein the expanding/contracting means comprises arm portions which can be inserted at inner sides of the hard core and rollers which are provided at one end of the arm portions, and ~~the wherein the moving means comprises~~ driving means for moving the arm portions in an axial direction and in a radial direction of the hard core.

9. (previously presented): The apparatus for manufacturing a green tire according to claim 5, further comprising pressing means for pressing the bladders, when they are inflated, toward the hard core, and press-contacting turn-up portion of the carcass with a main body.

10. (previously presented): The apparatus for manufacturing a green tire according to claim 6, further comprising pressing means for pressing the bladders, when they are inflated, toward the hard core, and press-contacting turn-up portion of the carcass with a main body.

11. (new): The method of manufacturing a tire according to claim 1, wherein the sheet member is provided at an expanding/contracting unit provided at an inner side in a radial direction of the bead core and/or the toroidal hard core, and the edge of the carcass is attached to the sheet member.

12. (new): The apparatus for manufacturing a green tire according to claim 5, wherein the sheet member is attached to the engaging members.

13. (new): The apparatus for manufacturing a green tire according to claim 6, wherein the sheet member is attached to the carcass-engaging portions.